

ABSTRACT

The present invention relates to novel methods and compositions useful for detecting whole parathyroid hormone at a physiological level and parathyroid fragments in a mammalian sample. Such detections may be useful to different parathyroid diseases or disorders in a subject, such as hyperparathyroidism and related bone diseases, from normal or non-disease states. One detects whole or non-fragmented (1 to 84) parathyroid hormone in a biological sample and optionally one or more of a selection of non-whole parathyroid hormone peptide fragments that may or may not function as a parathyroid hormone antagonists. By either comparing values or using independently the value of either the one or more of a selection of non-whole parathyroid hormone peptide fragments, the whole parathyroid hormone, or the combination of these values one is able to differentiate parathyroid and bone related disease states, as well as differentiate such states from normal states.